AES Technical Committee on Spatial Audio

Notes from the meeting of the TC at the 139th AES Convention, New York City

Date: October 31 2015, 1-2 PM

Attendees:

Alexander Krüger  alexander.krueger@technicolor.com  Technicolor
Nils Peters       npeters@qti.qualcomm.com  Qualcomm
Karlheinz Brandenburg bdg@idmt.fraunhofer.de  Fraunhofer IDMT
Jürgen Herre      hrr@iis.fraunhofer.de  Fraunhofer IIS
Ville Pulkki      ville.pulkki@aalto.fi  Aalto University
Emanuël Habets    emanuel.habets@audiolabs-erlangen.de  Audiolabs Erlangen
Nuno Fonseca      nuno.fonseca@ipleiria.pt  Polytechnic Institute of Leiria
Frederick Umminger frederick_umminger@playstation.com  Sony
Todd Welti        todd.welti@harmann.com  Sony
Jonathan Lane     jonathan.lane@us.panasonic.com  Panasonic
Jung Wook Hong    jonathan.Hong2@mcgill.ca  McGill
Matthieu Parmentier matthieu.parmentier@francetv.fr  France Télévisions
Jürgen Peissig    juergen.peissig@sennheiser.com  Sennheiser
Christof Faller   christof.faller@illusionic.com  Illusionic

Meeting chair: Nils Peters
Co-chair: Sascha Spors (not present)

Reports from past events

- Other conferences on spatial audio (not much discussed)
  - *ICSA 2015*, Graz, Austria

Activities at the 139th AES Convention related to the TC for spatial audio

A number of workshops and tutorials related to spatial audio happened during this AES Convention:

- Tutorials:
  - *Parametric Spatial Audio Processing: An Overview and Recent Advances*, E. Habets and O. Thiergart
- Workshops:
ISO/MPEG-H Audio - The New Standard for Universal Spatial / 3D Audio Coding, J. Herre (chair)

Immersive Audio Coding, C. Faller (chair)

Immersive Audio with Height Channels: Theory and Practice, D. Bowles (chair)

Immersive Audio Signal Processing and Effects, C. Faller (chair)

Spatial audio demos

- 9 different spatial audio demo events
  - 8 sessions onsite in a well-treated and well-equipped conference room at convention site
  - 1 session (3 h) offsite at NYU facility
  - Spatial Audio demos were always well received

- There were also additional demo rooms by some loudspeaker vendors demonstrating immersive audio

Upcoming events

The following upcoming events have been announced by the chair/participants:

- **DREAMS** - Dereverberation and Reverberation of Audio, Music, and Speech, 2016 AES International Conference, Feb 3-5, Leuven, Belgium
- **Sound Field Control**, 2016 AES International Conference, July 18-20, 2016, Guildford, UK
- **Headphone Technology**, 2016 AES International Conference, Aug 24-26 216, Aalborg, DK
  - Conference paper co-chair Jürgen Peissig gave an overview of topics
    - see [http://www.aes.org/conferences/2016/headphones/](http://www.aes.org/conferences/2016/headphones/)
  - paper deadline March 2016
  - Proposals for workshop and tutorials are welcome

- **140th AES Convention**, Paris, June 4 - 7, 2016
  - papers deadline: Jan 12 2016
  - workshop deadline: Jan 12 2016
- **141st AES Convention**, Los Angeles, US (fall 2016)
- **142nd AES Convention**, Berlin, Germany (Spring 2017)

Proposals for Workshops/Tutorials/Special Sessions

- M. Parmentier: Workshop or special session for binaural audio
- Ville Pulkki: Tutorial on spatial hearing
- Nils Peters: HOA compression and reproduction
- HTML and web audio APIs
- Loudness in spatial audio
• Towards a reference renderer for object-based audio

**Other business**

**Spatial Audio Glossary**

• still work in progress
• Members of the TC are invited to contribute
• please contact Sascha Spors

**Awards (Reminder)**

• Please submit recommendations for AES awards and fellowships
• further information under www.aes.org/awards

**Technical Council Forum (Reminder)**

For the TC, a discussion forum is provided on the website of the AES. You can reach the forum via “My Member Portal” when logged in on the AES website or by the direct link https://secure.aes.org/forum/tc/sa/.